

Application No. 10/784,445
Response dated May 17, 2005
to Office Action mailed April 4, 2005

REMARKS

The Examiner has rejected claims 1-6, 12, 18-23 and 29 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 of Devoe et al. U.S. Patent No. 6,695,940. Claims 18-21, 23 and 29 are rejected under 35 U.S.C. § 103(c) as being unpatentable over IBM Technical Disclosure Bulletin "Improved Construction of Bender Element Squeeze Bearings." Claims 31, 32, 34-36, 38, 42 and 43 are rejected 35 U.S.C. § 103(a) as being unpatentable over JP 2-8008 Abstract. Claim 33 is rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 2-8008 Abstract and further in view of Kendall U.S. Patent No. 5,827,620. Claims 7-11, 13-17, 24-28, 30, 37 and 39-41 would be allowable if rewritten to overcome rejections under 35 U.S.C. § 112, second paragraph.

Applicants would like to thank the Examiner, Melvin C. Mayes, for the telephone interview that occurred on May 16, 2005 between Applicants' representative, Kristi L. Davidson, and the Examiner.

With respect to the allowable subject matter, Applicants note that there are no §112 rejections to overcome.

Claim 18 is amended herein to clarify that the first electrode tube is "in solid form and of sufficient structural integrity to serve as a supporting structure" and that the electrode tube is "the supporting structure for the green ceramic material during wrapping, laminating and sintering and serves as the inner first electrode in the tubular reaction chamber." In other embodiments, a mandrel is used as a supporting structure for the green materials during formation of the ceramic tube. In the embodiment of claim 18, however, the mandrel is eliminated as the supporting structure for the green material. In the IBM Bulletin, the inner electrode is provided as part of a green material wrap around a mandrel. Thus, the reference does not teach or suggest providing a inner electrode by using a solid electrode tube as a supporting structure during formation of the ceramic tube from a green ceramic material. Not only does the solid electrode tube support the green material during wrapping, laminating and sintering, but the

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ceramic material/tube need not be removed from the support structure because it ultimately serves as the inner electrode. While a mandrel may still be used in this embodiment to secure the solid electrode tube during formation of the ceramic tube, the mandrel does not serve as the supporting structure for the green material. In the IBM Bulletin, the mandrel is clearly serving as a supporting structure for the green materials. Therefore, claim 18, as amended, is not taught or suggested by the IBM Bulletin. Applicants therefore request that the rejection be withdrawn. During the interview of May 16th, the amendment was discussed with the Examiner, and it was agreed that the amendment to claim 18 does overcome the rejection over the IBM Bulletin, and thus Examiner agreed to remove the rejection.

The amendment to claim 18 is also believed to distinguish the claim from claim 13 of U.S. Patent No. 6,695,940, which is the subject of the double patenting rejection. Therefore, it is respectfully requested that the rejection of claims 18-23 and 29 for double patenting be withdrawn.

With respect to the rejection of claims 31-32, 34-36, 38 and 42-43 over the JP Abstract, Applicants respectfully assert that there is no *prima facie* case of obviousness. The JP Abstract does not teach or suggest burning off the sacrificial organic material during sintering, as recited in claim 31. Rather, the JP abstract discloses using sticking-prevention sheets, which are removed after lamination, but before firing. Because the reference discloses removing the sheets prior to the firing step, the reference does not teach or suggest leaving the sheets on the tube and burning them off during the firing step. In the interview of May 16th, the Examiner agreed that the reference does not teach or suggest burning off the sacrificial sheets during the firing step, such that the Examiner agreed to remove the rejection over the JP Abstract. Examiner did not provide a translation of the full Japanese application, and indicated that he would confirm that the full reference does not provide any relevant teaching beyond that provided in the Abstract.

With respect to the obviousness-type double patenting rejection, a terminal disclaimer is submitted herewith.

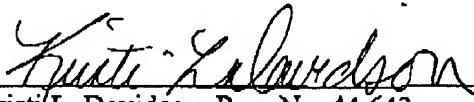
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In view of the foregoing amendments to the claims and remarks given herein, Applicants respectfully believe this case is in condition for allowance and respectfully request allowance of the pending claims. If the Examiner believes any detailed language of the claims requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. The Examiner's prompt attention to this matter is appreciated.

Applicants are of the opinion that no additional fee is due as a result of this amendment. If any charges or credits are necessary to complete this communication, please apply them to Deposit Account No. 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS LLP.

By: 
Kristi L. Davidson, Reg. No. 44,643

2700 Carew Tower
441 Vine Street
Cincinnati, OH 45202
513/241-2324 (voice)
513/241-6234 (facsimile)
KLDavidsonResponse to 04-04-05 OA.doc